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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,641	01/06/2006	Roelf Van Der Wal	NL 030761	1969
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EXAMINER				
WILLIAMS, ARUN C				
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2838				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/563,641

Applicant(s)

VAN DER WAL ET AL.

Examiner

ARUN WILLIAMS

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 25 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/6/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1- 4,7-11,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lethellier ,(Lethellier), USPAT 6,441,597 in view of Schetelig et al,(Schetelig), USPAT6,895,229 and further in view of Neft, USPAT4,896,242

As for claims 4,7-11,13,14 Lethellier discloses and shows in Fig. 2 switch current measuring circuit (28)(also first switch current measuring circuit); the circuit comprising a current sensing stage (connected to the output of the inductor(16))(col.5, lines 12-14);Pulse width modulated circuit (22); AC current transformer (110). Still lack the limitation such as an offset stage. Schetelig discloses an offset stage (21) for adding

two signals together which is coupled to an offset generator (18)(col.3, lines 33-40 & col.5, lines 14-20). Schetelig is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use an offset stage. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lethellier by using an offset stage for advantages such as making setting operations simple (col.3, lines 41-42), as taught by Schetelig. Lethellier discloses the claimed invention except for second switch current measuring circuit. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to second switch current measuring circuit, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Still lacking the limitation such as a current sensor coupled in series with the switch. Neft disclose and shows in Fig. 2 a current sensor (HT-A) coupled in series with the switch (col.4, lines 18-20) Neft is evidence that ordinary skill in the art would find a reason, suggestion or motivation to have a current sensor coupled in series with the switch. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the Lethellier modified by Schetelig having a current sensor coupled in series with the switch advantages such as detecting a fault of the switch (col.4, line 21), as taught by Neft.

Claims 1-3 are obvious in the structure and they recite the same elements in a method format.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lethellier and Schetelig in view of Neft and further in view of Akamatsu et al, (Akamatsu), USPAT4,298,838

As for claims 5 and 6, Lethellier in view of Schetelig and Neft differs from the claimed invention because he does not explicitly disclose a resistor coupled in parallel to the secondary transformer winding.

Akamatsu discloses and shows in Fig. 66 a resistor (R4) coupled in parallel to the secondary transformer winding (col.36, lines 30-33)

Akamatsu is evidence that ordinary skill in the art would find a reason, suggestion or motivation to couple a resistor in parallel to the secondary transformer winding.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lethellier modified by Schetelig and Neft by coupling a resistor in parallel to the secondary transformer winding for advantages such as providing a stabilize circuit operation (col.36, line 33), as taught by Akamatsu.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lethellier and Schetelig in view of Neft and further in view of in view of Kushida et al, (Kushida), US2002/0185987

As for claim 12, Lethellier differs from the claimed invention because he does not explicitly disclose an inverter circuit comprising a current sensing circuit.

Kushida discloses and shows in Fig. 1 a inverter circuit (4) and current sensing circuit (17) (par.[0040])

Kushida is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use an inverter circuit comprising a current sensing circuit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lethellier modified by Schetelig and Neft by using inverter circuit comprising a current sensing circuit for advantages such as providing a current detection of current flow within the inverter circuit (par.[0040]), as taught by Kushida.

Response to Arguments

Applicant's arguments filed 3/25/2008 have been fully considered but are now moot in view of the new grounds of rejection necessitated by amendment.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARUN WILLIAMS whose telephone number is (571)272-9765. The examiner can normally be reached on Mon - Thurs, 6:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on 571-272-23612361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arun Williams
Examiner
Art Unit 2838

/A. W./
Examiner, Art Unit 2838

*/Bao Q. Vu/
Primary Examiner, Art Unit 2838
July 10, 2008*